

HQ:NSC36/Cr-Au BS

AFM Probe with 3 Different Soft Tapping Mode AFM Cantilevers

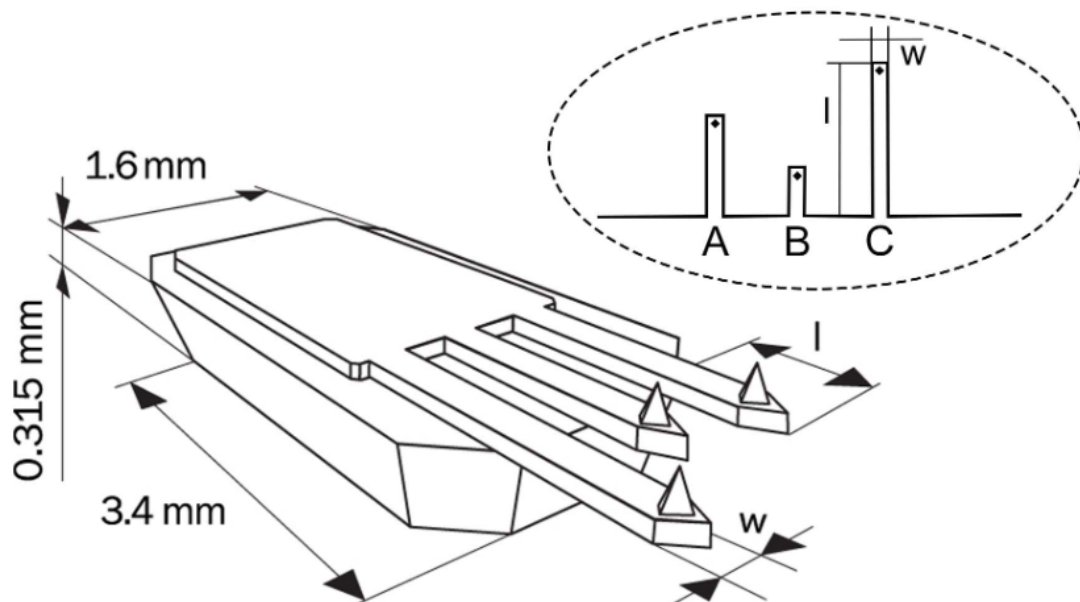
AFM probes of the HQ:NSC36 series have three different soft tapping mode AFM cantilevers on one side of the holder chip. They can be used in various applications.

The HQ AFM probes offer high consistency of the AFM tip radius, the AFM cantilever reflectivity and the quality factor.

The aluminum reflective coating enhances the laser reflectivity of the AFM cantilevers by approximately 2.5 times. For operation in liquids we recommend using the HQ:NSC36/Cr-Au BS with a reflective gold coating.

Coating

Reflective Aluminum



AFM Probe Specifications

AFM Tip

| SHAPE | HEIGHT | FULL CONE ANGLE | RADIUS |
|---------|--|-----------------|--------|
| Rotated | 15 μm (12 – 18 μm)* | 40° | < 8 nm |

AFM Cantilever

| CANTILEVER | SHAPE | FORCE CONST. | RES. FREQ. | LENGTH | WIDTH | THICKNESS |
|--------------|-------|------------------------------|----------------------------|--|---|--|
| Cantilever A | Beam | 1 N/m (0.1 – 4.6 N/m)* | 90 kHz (30 – 160 kHz)* | 110 μm (1 – 115 μm)* | 32.5 μm (29.5 – 35.5 μm)* | 1 μm (0.5 – 1.5 μm)* |
| Cantilever B | Beam | 2 N/m (0.2 – 9 N/m)* | 130 kHz (45 – 240 kHz)* | 90 μm (1 – 95 μm)* | 32.5 μm (29.5 – 35.5 μm)* | 1 μm (0.5 – 1.5 μm)* |
| Cantilever C | Beam | 0.6 N/m (0.06 – 2.7 N/m)* | 65 kHz (25 – 115 kHz)* | 130 μm (1 – 135 μm)* | 32.5 μm (29.5 – 35.5 μm)* | 1 μm (0.5 – 1.5 μm)* |

* typical values